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**PRIMITIVE DISTILLATION AMONG THE TARASCOES.**

BY JOHN G. BOURKE.

During the month of September, 1891, it was my good fortune to be able to visit the romantically beautiful and fertile region of Lake Patzcuaro, in western Mexico.

It may be of interest to know that Lake Patzcuaro is the highest body of water in the world navigated by steamboat ; that it is 45 miles long, 16 miles wide at its widest point, and 360 feet deep, with water crystalline and cold, and with scenery strongly recalling that of Lake Luzerne, in Switzerland. On its banks is situated the good-sized city of Patzcuaro—old, well built, and quaint—whose gentlemen still cling to the long, graceful Spanish cloak, the legitimate child of the Roman toga, and whose “young bloods” cavort about on spirited ponies, wearing suspended from their waists elegant silver-handled swords, probably one of the very last instances, at least on our own continent, of an adherence to this obsolete proof of gentility.

My purpose in going down there was to visit the famous coffee district of Uruapan and to examine the ruins of the college established by the Franciscans in 1581 for the education of the young men of the Tarasco race.

To get to these ruins, which are on the island of Tzintzontzin, it was necessary to hire a *chaloupa* or skiff, paddled by six stout Tarascoes. It was quite early in the morning when the water sprinkled from our paddles, and the Hotel Ybarra—the pompously titled inn wherein I had rested over night—faded from view astern. Our craft looked somewhat like a second-hand, unpainted Venetian gondola, with an absurdly high prow, upon which was perched the bow sculler or oarsman. The crew were jolly and good-natured, and two or three of them were able to speak Spanish with fluency. Many questions were plied by the natives as to the object of my going upon the lake and what business had brought me so far from my own country ; but all these I answered gladly, intent on making up for it all in time. My note book was kept in hand all the while and soon began to give good evidence of the

patience and generosity of the Tarascoes, in turn, in responding to my interrogatories.

It was a very interesting boat ride and one productive of most startling information. The *patron* or captain of the *chaloupa* assured me—and all the crew confirmed his statement—that there was once a whirlpool in the middle of the lake, into which their ancestors in the olden time were accustomed to throw one or more babies every year. An earthquake or some other convulsion of nature some years ago had closed up this outlet (for such it would seem to have been), and ever since then the waters had been gradually deepening until they had now encroached upon fences, sheds, houses, and fields formerly high above their reach.

We passed by the rocky islet of San Piedrecito, to which priests still go on certain occasions to bless the waters of old Patzcuaro and the labors of the dark-skinned fishermen who sit stolidly and reverently in their home-made wooden *chaloupas* at its foot.

When I suggested that before the coming of the *padres* the medicine-men of the tribe must have occupied that isle of the fisherman the *patron* responded urbanely: "Yes, that is true; but in those times, you know, our grandfathers used to throw little babies into the water and eat human flesh."

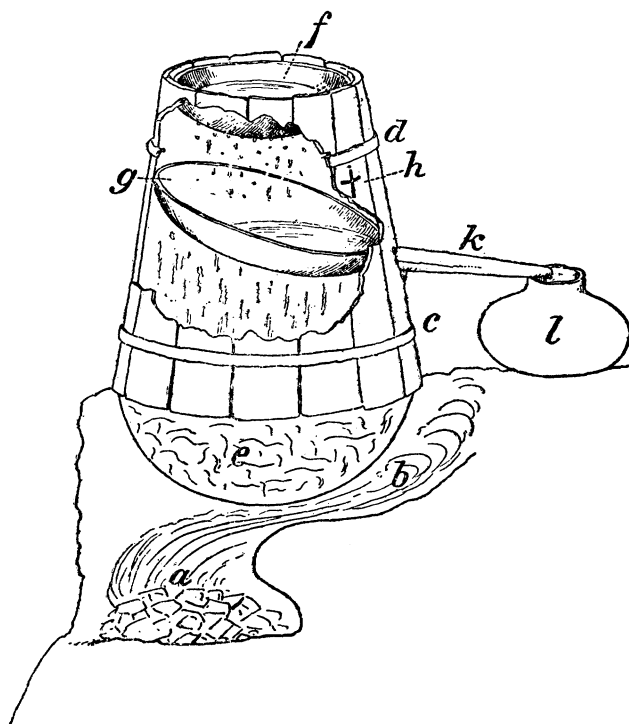
We made side excursions to many points to see the fishermen setting their nets or making hauls of the silvery sardine-shaped *char-raras*, so highly prized by the epicures of the city of Mexico, and to watch the women and children on the bank industriously plaiting *petates* of tule or corn leaves, making baskets, or baking pottery beautiful in contour, fine in grain, and rich ruby-red in color.

Many *chaloupas* passed us, hurrying to Patzcuaro to sell or to buy. The whole scene was interesting, animated, and varied. Soon a thin line of smoke was seen issuing from the foliage on the crest of a knoll, and each Tarasco looked anxiously at me as the *patron* said: "They are making mescal over there. Would you not like us to row over? It is not very far." I replied that I would, but intimated that they must show me all about the mescal-making and keep their promise to guide me to Tzintzontzin. No sooner agreed than the prow of the *chaloupa* was ploughing its way to the primitive alembic.

I may omit any references to the kind treatment received from all the family on the island of Tzintzontzin—as this proved itself to be—and need not describe the shrine of the Madonna, in front of

which, in an earthenware brazier, was burning a small piece of *copal*, a favorite offering made by the Aztec tribes to their gods.

The still was erected at the edge of a vertical bank of hard clay, a situation which simplified labor very much. The whole apparatus was of the most primitive kind, but the product was exceptionally good and clear.



A Tarasco still.

At *a* was the fire, with outlet for smoke at *b*; *c* and *d* were hoops, against which were placed the staves, secured on the outside by other hoops or circles apparently of willow. At *e* was the mashed mescal in a large earthen bowl; *f*, on top of the still, was another large bowl full of cold water, which was ladled out by an attendant as it became heated and supplied afresh. The steam arising from the heated mescal condensed against the bottom of the bowl (*f*) filled with cold water and then dropped into a bowl (*g*) placed at

at angle. This bowl was called the *cuchara* or spoon. From the *cuchara* the mescal ran out through the tube *k*, made of mescal stalk, into the *olla* or water jar *l*. On one of the staves, at *h*, was a rudely incised crucifixion, marked there, as I was told, to ensure *buena suerte* ("good luck").

The entire process of preparing the mescal for distillation was in operation at the time and was explained in detail. Only the center of the plant, resembling a cabbage head and called the heart, was used, the exterior leaves being rejected, although they are rich in saccharine matter and are used as food by the Apache and Navajo Indians.

These hearts were first baked in "mescal pits" lined with heated stones and covered with wet grass and earth. Upon being transferred to shallow basins made in the ground and lined with flat rocks they were mashed into a coarse pulp with heavy wooden mallets, then exposed to the sun to insure fermentation. It was this fermented mass which I saw placed in the kettle of the still (at *e*).

In this description, bald as it is, I desire to call attention to what seems to me a very curious point. There was nothing used which was not strictly aboriginal; the crucifixion need not be excepted, as the sign of the cross has been a religious emblem of the American tribes and observed as such from Gaspe to Yucatan.

The wooden barrel was very rude in construction, the gaping seams being closed with wet clay and gum. The Tarascoes, from time immemorial, have been celebrated workers in wood and have felled and cut large pine trees of which they have built their *chauloupas* 25 or 30 feet long. They also make all the wooden spoons, ladles, and other kitchen ware used in that part of the country.

I am far from committing myself to the proposition that the Mexican Indians were acquainted with distillation before the time of the conquest. Indeed, when and where distillation was first practiced will perhaps never be known. The Chinese claim the discovery for one of their kings who lived 2600 B. C. I do not recall any reference to the distillation of liquors in the works of Sahagun, Motolina, or other early clerical writers on the manners and customs of the Aztecs. The omission, however, is not of great significance. Those writers have preserved for science much valuable ethnological material, but they observed and wrote from the standpoint of the missionary and not from that of the anthropologist. The word

*vino* (wine) occurs with some frequency in their treatises, but it has generally, and I think correctly, been regarded as referring to the fermented beverage *pulque*.

Mescal is distilled in all parts of Mexico, in the rudest hamlets, in the most secluded mountains, but always in the manner above described. A finer liquor called *tequila* is made by distilling the fermented sap of the maguey.

It would be natural to assume that among the first things the natives learned from the Spaniards after the conquest of Mexico was the manufacture of intoxicants. The Mexican peon has a natural taste and skill in such preparations, and uses not only the mescal and the maguey, but the Spanish bayonet and the yucca as well. He also makes from the *tuna* or Indian fig (the fruit of the *nopal* cactus), a kind of hard cider, called *colonche*, which is quite intoxicating.

I repeat that the failure of the Spanish writers to mention certain things is no great argument against their existence, and I cannot make this more clear than by saying that they have all ignored the employment by the aborigines of the trident and throwing-stick, which I found in daily use among the Tarascoes of Lake Patzcuaro. Prof. Otis T. Mason informs me that the specimen of the latter which I was fortunate enough to procure is identical with the *atlatl* which figures in the codices or Aztec picture-writings.

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THE ANCIENT GRAVES OF THE VAZIMBA, the aboriginal inhabitants of the interior of Madagascar, are found scattered over the central province. These are shapeless heaps of stone, generally overshadowed by a *Fànō* tree, a species of acacia, which has a semi-sacred character, its seeds being used in divination. Could these graves, like the ancient English barrows, be opened, doubtless much light would be thrown on the rather difficult question of the affinities of these Vazimba; but to meddle with any tomb, much more one of these ancient ones, is one of the most heinous offences among the Malagasy. A considerable number of upright stones, termed *Vätolàhy* (lit. "male stones"), huge undressed blocks of granite, are also found on the hills and downs. These are memorials of former chieftains or of battles of the old times.—Sibree in *Proc. Royal Geog. Soc.*, p. 746, Nov., 1892.

MAKANGA CUSTOMS.—Mr. D. J. Rankin, in the November number of the *Scottish Geographic Magazine*, speaks of his arrival on the Revugwe at Kamsiki, in the Loangwa-Zambesi basin, Africa, as an occasion of great public rejoicing and festivity by the natives. "Several miles from the town I was met and escorted in by the chief's state band, consisting of flutes, drums, and native musical instruments, my near approach to the kraal being heralded by an incessant firing of muskets, tootling of flutes, banging of drums, and deafening shouts and cries from a crowd of two or three thousand people. Being led into the stockade by the chief, we were regaled in the courtyard by a number of amusements, lasting for several hours, which included conjuring, dancing, singing, and feats by strong men—the latter being similar to the feats performed in our own country fairs. In one of them a heavy wooden mortar used for pounding corn and rice, weighing about one hundred pounds, is placed on the stomach of a man, who is supported on two stools, and any one in the audience is invited to pound the rice or flour put in the mortar. A small wooden figure of a man is carefully placed on a mat by the performers, this figure being a kind of fetich to protect them from injury during their dangerous performance. These people come from the hill tribes, and their fetich created a great deal of amusement and ridicule amongst the higher-class Makanga sitting round."

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WOMEN OF THE TROBRIAND ISLANDS.—The quarters of the principal chief of the Trobriand islands, British New Guinea, include seventeen houses, each occupied by a separate wife. At a little distance is the humbler establishment of the second chief, with the more modest allowance of five wives. Many of these ladies were old and far from prepossessing, but it seems that either from innate courtesy or some more prudential reason the Papuan always treats his older wives with more consideration than the younger. The people are all clothed, the women in fact possessing two petticoats, the one undyed, the second, used for dancing and other formal occasions, dyed and worn over the other; and they made a point of never coming into the governor's presence without this.—Trotter in *Proc. Roy. Geog. Soc.*, p. 791, Nov., 1892.